

CLAIMS

1. Process to manufacture a clad strip, < 1.5 mm thick, intended for the manufacture of brazed heat exchangers, comprising:

5 - casting of a plate made of core alloy composed as follows (% by weight):

Si < 0.8 Fe < 0.8 Cu: 0.2 - 0.9 Mn: 0.7 - 1.5  
Mg < 0.4 Zn < 0.2 Ti < 0.1 other elements < 0.05  
each and < 0.15 in total, the remainder aluminum,

10 - homogenization of said plate between 550 and 630°C for at least one hour,

- cladding on one or two sides of said plate of a brazing aluminum alloy,

- hot rolling followed by cold rolling of the plate to a thickness close to the final thickness,

15 - recrystallization annealing of the strip between 300 and 400°C,

- strain hardening of the annealed strip to obtain a permanent deformation between 2 and 10% and the final thickness.

20 2. Process according to claim 1, characterized in that the core alloy contains less than 0.01% Cr, Zr, Hf, V or Sc.

3. Process according to any of claims 1 or 2, characterized in that the brazing alloy contains 5 to  
25 13% silicon.

4. Process according to any of claims 1 to 3, characterized in that the homogenization time is greater than 3 hours.

5. Process according to any of claims 1 to 4,  
30 characterized in that the strain hardening of the

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annealed strip is performed with a permanent deformation between 4 and 8%.

6. Process according to any of claims 1 to 5, characterized in that the strain hardening of the  
5 annealed strip is performed by skin-pass type rolling.

7. Process according to any of claims 1 to 5, characterized in that the strain hardening of the annealed strip is performed by tension levelling.

8. Clad strip manufactured using a process  
10 according to any of claims 1 to 7, characterized in that, after shaping and brazing, it shows a perforation-free service life in a SWAAT test according to ASTM G85 standard of over 40 days.

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